Data management in the Aurum ART Implementation programme

Health Management Information Systems Conference

Elements of the system

- Data forms
- Administration Manual
- Database
- Web-based system
- STATA analysis for reporting

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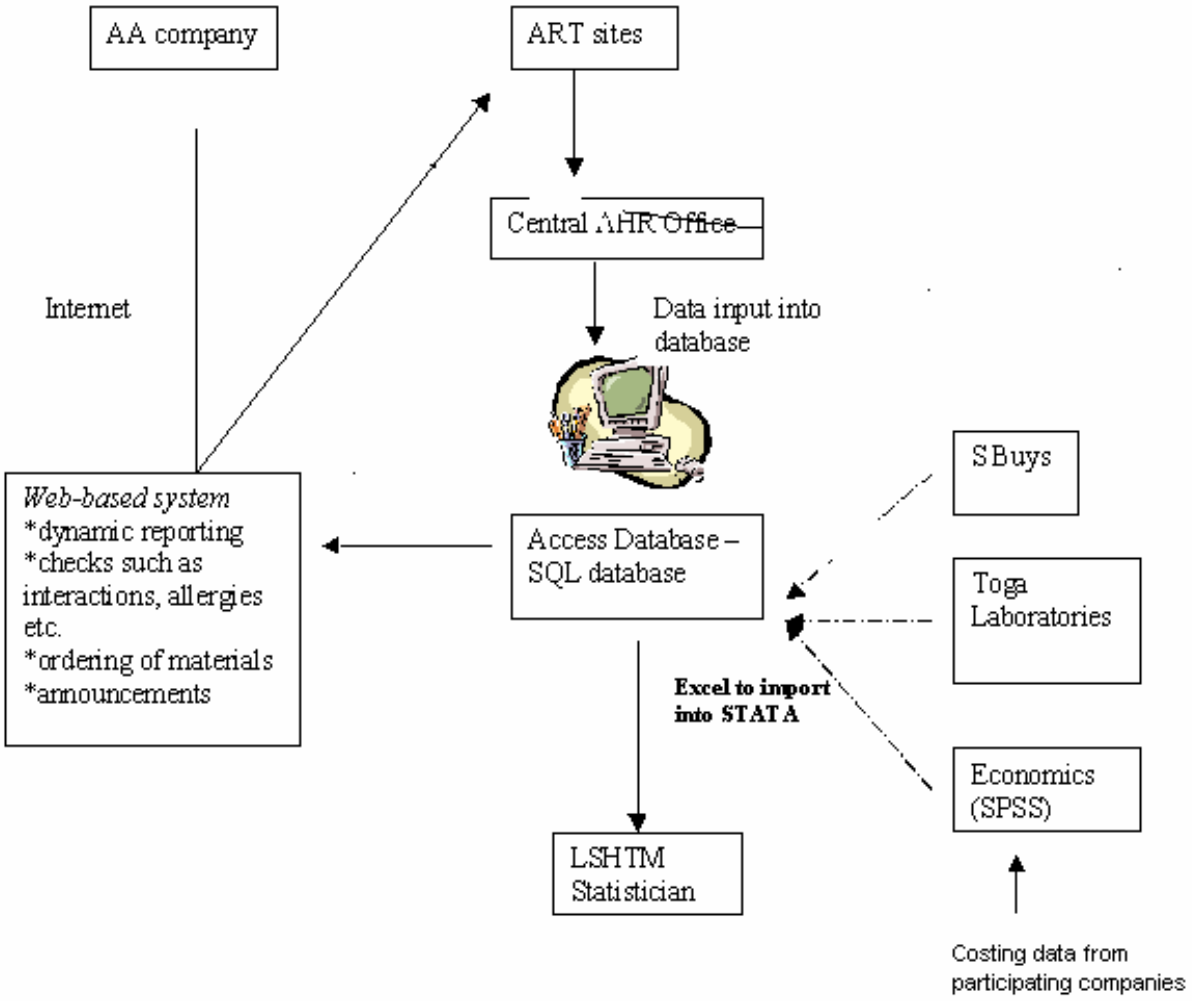
Information system



Strengths of the system

- Paper-based: can be implemented anywhere
- No need for equipment to be put down, problems with security, training of staff etc.
- Web-based : can be accessed by the users if facilities available
- Use of data capturers to collect the data
  - Trained individuals, more focused, easier control of data

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Additional benefits

- Paper trail for validation of research results
- Double entry to ensure accuracy of data
- Uniform system during the evaluation
- Easy to transfer to the STATA for data analysis
- Easy to run queries for adhoc quality control

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Data forms

- Developed over many years with input from clinicians working on the programme
- Boxes for data entry
- Coded responses
- Easy to check that all has been filled in
- Tracking at bottom of page

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WELLNESS CLINIC

CLINIC NO……WC ☐☐☐☐

COMPANY NO …… ☐☐☐☐☐☐☐☐

HOSPITAL NO ……DH00 ☐☐☐☐☐☐

AGE …… ☐☐

HOSPITAL STICKER

SEX…… ☐

1 = Male 2 = Female

DATE OF FIRST VISIT …… ☐☐/☐☐/☐☐☐☐

HOW REFERRED TO CLINIC…… ☐

1 = PHC 2 = Wards/OPD 3 = TB Clinic 4 = PSS 5 = VCT 6 = Other

CURRENT HOSTEL DWELLER …… ☐

1 = Yes 2 = No

SMOKING HISTORY…… ☐

1 = Yes 2 = No

CERTIFIED FOR SILICOSIS …… ☐

1 = Yes 2 = No

HIV ELISA TEST RESULT …… ☐

1 = Positive 2 =Negative

DATE OF FIRST POSITIVE HIV ELISA TEST …… ☐☐/☐☐/☐☐☐☐

11/11/111= Not Applicable/Unknown

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Administration manual

- Explanation of the data entry rules
- Provides clarity on what is asked with every question
- Taught on in the training of nurses and referred to in training of doctors

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Database

- Access database – SQL conversion
- Consistency checks
- Validation rules
- Double entry

- Auditing report
  - Data cleaning

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Web-based system

- Accessed on the internet - No other software needed
- Password protected
- Access at sites to:
  - Patient reports
  - Site reports

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Monitoring

MONITORING REPORT FOR ART PROGRAMME:

Date:	22 / 09 / 2003
Site Name	Hospital
Site Number:	17
Name of Monitor:	
Name of person in Charge:	

MASTER FILE:

Current Guidelines (June 2003)	Yes
Current Manuals (March 2003)	Yes
Current Consent Forms (20/11/2002)	Yes
Current Counselling Protocols	Yes
Patient Register correct	Yes
Delivery notes correct	N/A
Serious adverse events report correct	Yes

PATIENT FILES:

Correctly filed	100%
Programme consent form correctly signed	100%
Evaluation consent form correctly signed	50%
All blocks filled in	85%
Hospitalizations and outpatients events recorded correctly	100%
Karnofsky score	100%
Adherence recorded correctly	100%
Physical examination done and recorded correctly	100%
Chest X-rays done appropriately	85%
WHO staging correct	95%
Correct lab test done	90%
Correct follow up dates	100%
Adverse events reported correctly	100%
Lab tests recorded	100%

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Reporting

- Serious adverse events
  - Reported to the chairpersons of the steering, ethics & national pharmacovigilance committees and relevant pharmaceutical companies

- Quarterly reports
  - Uptake of ART
  - Side effects and serious adverse events
  - Adherence to treatment
  - Discontinuation of treatment
  - Absenteeism details on patients on treatment
  - Costs

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Challenges

- Getting data to clinicians on site
- Adherence with data entry from sites
- Pressure for real time data
- Continuous reporting demands
- Shift to electronic data capture

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Future developments on the system

- SMS messaging to patients for follow up dates
- Implementation of intelligence e.g. drug interactions etc.
- Monitoring of data entry staff
- Further integration with laboratory and pharmacy
- Improvement of access to personnel at sites

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